SAN DIEGO BAY COUNCIL

A coalition of San Diego environmental organizations dedicated to protection and restoration of San Diego's coastal water resources.

March 21, 2005

Chairman John Minan and Regional Board Members
California Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, California 92123-4340

RE: San Diego Bay Council Additional Comments on NPDES Nos. CA0108073 and CA0108181, Tentative Orders No. R9-2005-0005 and R9-2005-0006, Southern California Edison San Onofre Nuclear Generating Stations (SONGS) Units 2 and 3

Dear Chairman Minan and Board Members:

At the RWQCB March 9 hearing on Tentative Orders No. R9-2005-0005 and R9-2005-0006 the Board agreed to accept written comments up to close of business March 23. Accordingly, San Diego Bay Council ("Bay Council") and its member organizations: Sierra Club, San Diego Chapter; Environmental Health Coalition; San Diego Baykeeper; The Surfrider Foundation, San Diego Chapter; and San Diego Audubon Society; submit these additional comments.

We refer you the EPA document *Central Tenets of the National Pollution Discharge Elimination System (NPDES) Permitting Program*[1]. Part I Permit Administration under Conditions Subject to Disapproval states. " - Any permit that does not clearly identify the permitted facility and describe the authorized discharge location(s)."

The permit Fact Sheet on pages E-5 and E-6 describes the locations of the five discharges by latitude and longitude coordinates. However, the facility map in Attachment A of the permit depicts only three of the discharge outfalls, Units 1, 2 and 3. The outfalls for Discharge 4, the fish return, and Discharge 5, are not depicted on any of the facility maps. While providing the latitude and longitude coordinates to locate these outfalls may meet the letter of the above Tenet, one would have to transform these coordinates to an X-Y system in order to determine the proximity of these outfalls to each other for analyzing the power plant performance and compliance of the discharges. Furthermore, as we have commented previously, the locations of the cooling water intakes are not shown in the Tentative Orders. This further handicaps our analysis. For example, the distance of the fish return outfall from the intakes is important to assess the possibility of the discharged fish to be recaptured by the intake. Given these shortcomings, it is our view that the permit fails to meet the above Tenet.

[1] http://www.epa.gov/npdes/pubs/tenets.pdf

During the public hearing held on March 9, 2005 at the San Diego Regional Water Quality Control Board on the Tentative Orders, staff and the SCE representative explained that the information we were seeking was cited by reference. However, no specific citations were offered. Only that this information is available on file. It should be noted that at this hearing, staff presented a map that showed the cooling water intake locations that is not present in the Tentative Order facility maps. SCE presented a chart depicting the outfall diffuser and velocity cap. This chart was not in the Tentative Order.

On March 15, Mr. Kimura, representing the Sierra Club, filed a Public Records Access Request to view facility descriptions, monitoring and reporting program reports, water intake and ocean outfall and discharge descriptions, velocity caps on intake, fish return system, chlorination and heat treat operations, and receiving waters monitoring locations and maps. On March 17, RWQCB Public Records staff provided Mr. Kimura with a set of documents. With the exception of the monitoring reports, the other materials were not indexed for easy access.

The data did not provide the exact locations (coordinates) of the ocean water temperature monitoring and their relative locations to the discharges. The scales of the maps showing the locations of the discharges including the fish return were too small for the reviewer to obtain their accurate locations. The aforementioned map showing the cooling water intake locations was in this document review package but the scale was too small to be useful for analysis purposes. For example, one needs to accurately know the distance from the fish return outfall to the cooling water intake in order to assess the potential for the discharged fish to be recaptured by the cooling water intake.

The document review package contained the SCE 2003 Annual Marine Analysis and Interpretation report. This report provided limited information on the outfall and intake configuration and the outfall diffusers. The report also included the estimated 2003 monthly count and weight of fish impinged fish at Units 2 and 3. Page E-42 of the Fact Sheet in the Tentative Order cites fish impingement data for Unit 2 without providing the data source. However, the SCE data shows that this data is for Unit 3. The Fact Sheet should provide the estimated combined fish impingement and entrainment from Units 2 and 3, not jus one unit. For your information we have used the SCE data and provide the estimated monthly count and weight of fish impinged in 2003 at Units 2 and 3 and the combined totals for both units in Figures 1 and 2 are shown on the next page. The data reveals a strong seasonal influence, with highest fish losses in the summer months. It also shows that Unit 3 takes a much larger toll on the fishes than Unit 2; the 2.58 times more in the number of fishes and 2.88 times more in weight of the fishes. We have no explanation for this. The combined fish counts and weights are shown as the cumulative sums. The estimated total count of fishes impinged is 3,564,433. The estimated total weight of the impinged fish is 21,923 kilograms (48,231 pounds).

The document package contained a report prepared by NOAA[2] on their study of the SONGS fish return. The study showed a relatively high percentage of fish surviving at the discharge. It did not investigate the predation losses. No predation loss data were provided in the SCE report.

---

[2] M. Love, et al. NOAA Technical Report NMFS 76 April 1989, Analysis *of Fish Diversion Efficiency and Survivorship in the Fish Return.*

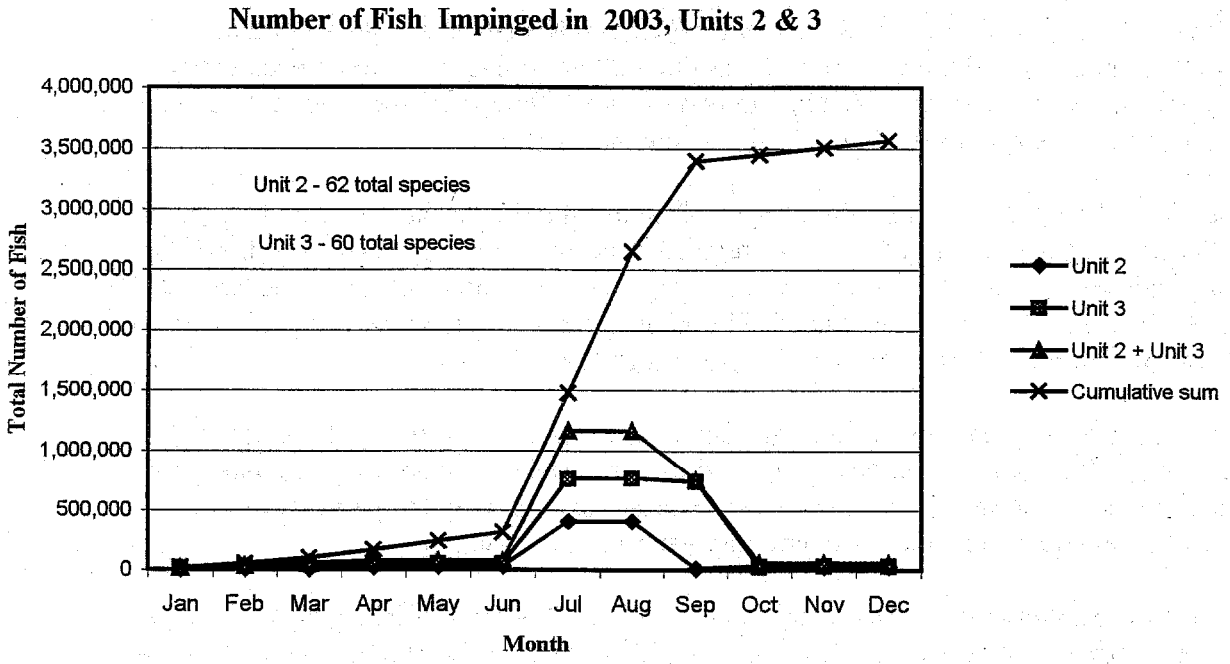

Figure 1

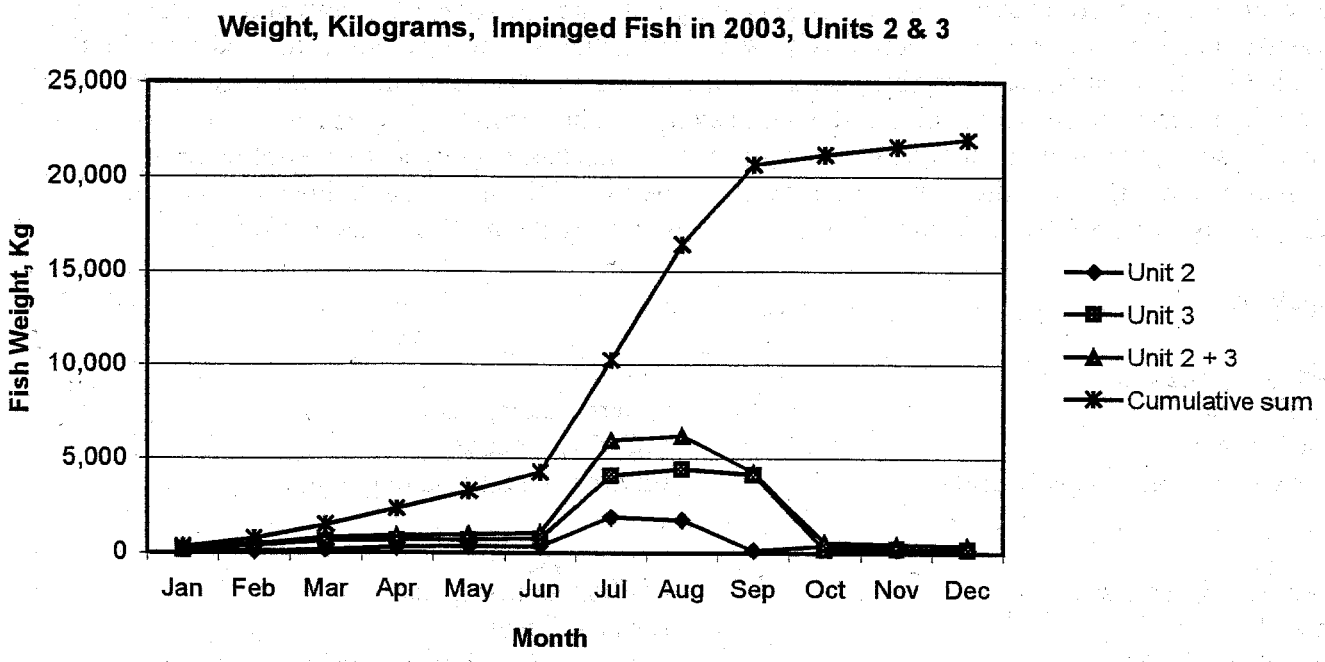

Figure 2

We recommend that the *Comprehensive Demonstration Study* investigate the large difference between the estimated number and the weight of the impinged fishes in Units 2 and 3 even though that intake flows are basically the same. We recommend the study determine the predation losses of the fishes returned to the ocean and sample the health of the returned fish.

There are two additional comments. Fact Sheet page E-2 states that the discharges from fish return, (Outfall 4) and the across-the beach (Outfall 5) are regulated by these permits. However, the Fact Sheet does not provide flow estimates at these two outfalls. Effluent Limitations for these two outfalls are given on page 15 of the two Tentative Orders. The Monitoring and Reporting Program does not list monitoring for the fish return outfall. This omission should be corrected.

The second comment is a question. Do marine organisms cause undesired fouling of the cooling water intake pipelines? If so, what maintenance procedures are used to remove the organisms and how are these organisms disposed? If disposed into the ocean, explain why the permits do not contain waste discharge requirements for both cooling water intakes systems?

In closing, we wish to respond to the question asked at the March 9 hearing if it is typical to adopt permits with more information than provided in the Tentative Orders for SONGS 2 and 3. As noted above, the *Central Tenets* for NPDES permits set basic standards. Our view is that the Tentative Orders failed to meet these standards. In our experience, there are no typical NPDES permits. Each permit must provide sufficient detail beyond that required in the *Tenets* for the interested stakeholders to evaluate the effectiveness of the permit to comply with the environmental laws and to address the associated critical issues. The South Bay Power Plant NPDES[3], for example, contained sufficiently detailed information about the facility including the intake and discharge infrastructures, the fish return, the steam condensers alloys, and benthic studies. This information was necessary to assess the critical issues of impingement and entrainment, thermal discharge, copper concentration in the discharge, and impacts to the benthic community. The SONGS 2 and 3 Tentative Orders have provided significantly less information as outlined in this and the prior comment letter.

Sincerely,

Ed Kimura
Water Issues
Sierra Club, San Diego Chapter

EK for
Albert Huang, Esq.
Policy Advocate
Environmental Health Coalition

EK for
Gabriel Solmer, Esq.
Staff Attorney
San Diego Baykeeper

EK for
Marco Gonzalez, Esq
Legal Advisor
Surfrider Foundation, San Diego Chapter

EK for
Jim Peugh
Audubon Society, San Diego Chapter

[3] Order No. R9-2004-0154, NPDES Permit No. CA0001368